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ANNUAL REPORT

OF THE

CHEMICAL EXAMINER TO GOVT.

United Provinces and Central Provinces

FOR THE YEAR 1945

15004

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FROM

COLONEL N. BRIGGS, C.I.E., M.R.C.S., D.P.H.,
V.H.S., I.M.S.,

INSPECTOR GENERAL OF CIVIL HOSPITALS,
UNITED PROVINCES,

TO

THE SECRETARY TO GOVERNMENT,
UNITED PROVINCES,
HOME DEPARTMENT (CRIMINAL).

Dated Lucknow, , 1946.

SIR,

GENERAL DEPARTMENT

I HAVE the honour to forward for the approval of the Govérnment the Annual Report of the Chemical Examiner to Government, United Provinces and Central Provinces, Agra, for the year 1945.

2. I have no remarks to offer on the report which is complete.

I have the honour to be,

SIR,

Your most obedient servant,

N. BRIGGS, COL., I.M.S.,

Inspector General of Civil Hospitals,
United Provinces.

ANNUAL REPORT OF THE CHEMICAL EXAMINER TO GOVERNMENT, UNITED PROVINCES AND CENTRAL PROVINCES FOR THE YEAR 1945

No. 4995/R-2.

FROM

M. B. ROY, ESQ.,

CHEMICAL EXAMINER TO GOVERNMENT,

UNITED PROVINCES AND CENTRAL PROVINCES, AGRA,

To

THE INSPECTOR GENERAL OF CIVIL HOSPITALS,

UNITED PROVINCES, LUCKNOW.

Dated Agra, the 30th November, 1946.

SIR,

I HAVE the honour to submit the report of the work done in the Department of the Chemical Examiner to Government, United Provinces and Central Provinces, during the year 1945. This is the 81st Annual Report of the Department.

2. The total number of cases examined during the year was 2,828 comprising 6,695 exhibits as compared with 2,731 cases consisting of 6,540 articles during the preceding year, an increase of 97 cases and 155 articles.

The number of articles examined in each case varied from 1 to 30.

3. The total number of analyses performed on behalf of the Central Provinces Government and other administrations for 1944 and 1945 is shown below:

Year	Central Provinces	Ajmer-Merwara	Indian States
1944	1,468	41	127
1945	1.328	44	141

Medico-legal section

4. One thousand, one hundred and fifty-six medico-legal cases and 4,204 articles were examined during the year under report as against 1,132 cases and 4,170 articles in 1944.

Human poisoning

5. The total number of cases examined under this head was 328. Poison was detected in 65·3 per cent. of cases as against 67·8 per cent. in 1944.

The nature of poisons detected is shown in table III.

Opium was the most commonly used poison. It was detected in 39·2 per cent. of the detected cases.

Dhatura, arsenic, alcohol, aconite, bhang and cyanide came in order of frequency forming 33·1, 10·7, 5·1, 2·8, 2·3 and 2·0 per cent. respectively of the detected poison (case wise). Other inorganic poisons were detected in 2·8 per cent. of the detected cases and other organic poisons in 2·0 per cent. of the detected cases.

In 204 cases, including 1 case of abortion, viscera were received. Poison was detected in 62·3 per cent. of these cases as compared with 63·6 per cent. for the year 1944.

The largest number of cases of fatal poisoning was received from Agra, viz. 19 followed by Kheri 9 and Allahabad 8.

Animal poisoning

6. Twenty cases were examined under this head as compared with 22 cases for the preceding year. The percentage of detection in these cases was 40 as compared with 59·1 for the year 1944. Yellow oleander was detected in 4 cases, arsenic in 3 cases and aconite in one case.

Stain cases

7. Eight hundred and six cases were examined under this section comprising 591 cases of bloodstains and 215 cases of blood and semen stains (sodomy and rape cases).

Three thousand and eighty articles alleged to be stained with blood semen, etc. were received in connection with 806 cases for examination against 2,958 articles received in connection with 775 cases in 1944. The percentage of detection in bloodstain cases (murder or hurt by violence) was 97·6 as compared with 94·6 per cent. for the year 1944. Spermatozoa were detected in 98·6 per cent. of cases of sexual offence as against 95·5 for 1944.

During the year under report 2,698 specimens of blood and other stains in 622 cases out of 806 were sent to the Imperial Serologist. The results of his examination were as follows:

—	Cases of murder or hurt by violence	Rape cases	Unnatural offence cases
Human blood	1,408	79	9
Ruminant animal blood ..	8	1	..
Blood of bird	4	..	..
Disintegrated	899	30	6
Blood too small for identification ..	6	2	..
No blood	202	1	..
Human semen	3	11	6
Semen disintegrated	..	20	3

Eighty-five cases were sent to the Imperial Serologist for the comparison of the blood groups as to identity or non-identity, but comparative blood grouping could be done by the Imperial Serologist only in thirteen of these cases, and two cases were sent for comparison of semen groups. Negative results were obtained in both the cases.

General Section (including Excise)

8. Two thousand four hundred and eighty-nine articles were examined as compared with 2,370 examined during the year 1944.

Contraband opium—Four hundred and fifty-one samples of opium were received in connection with illicit traffic. Of these samples, 367 were found to be contraband or adulterated.

In addition to the usual examination, all the samples of opium had to be assayed for prosecution purposes under the Excise Act.

Preparations of opium—Under this head 28 samples of madak, one sample of inchi, 2 samples of chandu and two samples of joga were examined during the year. In most of the above samples, the percentage of morphine and the total alkaloids had to be determined.

Besides contraband opium, 8 samples of cocaine, 19 samples of charas, 176 samples of ganja, 42 samples of bhang, 754 samples of liquor, 251 samples of wash, 42 samples of distillery spirit, 3 samples of beer, 7 samples of gin, one sample of rum, 17 samples of rectified spirit, 99 samples of denatured spirit, 138 samples of denaturants, 7 samples of fusel oil, 3 samples of essences, 4 samples of petrol, 5 samples of kerosine oil, 312 samples of medicines, 7 samples of water and 112 samples of miscellaneous articles were examined during the year.

The largest number of cases of illicit distillation was referred from Moradabad 126, followed by Fyzabad 80, Mirzapur 62, Fatehpur 57, Muzaffarnagar 54, Shahjahanpur 29 and Bulandshahr 24.

Staff

I was incharge of the Department from May 2 to July 30, 1945, when Dr. S. N. Chakravarti, Chemical Examiner, proceeded on leave and since August 31, 1945, due to the untimely death of Dr. S. N. Chakravarti, Chemical Examiner, I am holding the post of the Chemical Examiner. Except the above period Dr. S. N. Chakravarti was incharge of the Department during the year.

The members of the staff have all performed their duties satisfactorily during the year.

I have to tender my thanks to the Principal and the Professors of Anatomy and Pathology, Medical College, Lucknow, for assistance in special cases.

I have the honour to be,

SIR,

Your most obedient servant,

M. B. ROY, B.SC., A.R.I.C.,

Chemical Examiner to Government,

United Provinces and Central Provinces,

Agra.

TABLE I—*Summary of work done*

	1944		1945	
	Number of cases investigated	Number of articles examined	Number of cases investigated	Number of articles examined
Human poisoning case (A in Table II).	335	1,126	328	1,056
Animal poisoning cases (B in Table II).	22	41	20	43
Stain cases (C in Table II) ..	775	2,958	806	3,080
Miscellaneous Medico-legal cases (D in Table II).	1	45	2	25
Total ..	1,133	4,170	1,156	4,204
General analysis and other work (Table V).	1,598	2,370	1,672	2,491
Grand Total ..	2,731	6,540	2,828	6,695

TABLE II—*Showing results of medico-legal analysis according to cases*

		Nature of exhibits	1944			1945		
			Total number of cases investigated	Total number of cases detected	Total number of articles examined	Total number of cases investigated	Total number of cases detected	Total number of articles examined
		1	2	3	4	5	6	7
Human poisoning cases (A)	General	1. Cases in which viscera and contents were tested for poisons. The viscera of 209 individuals Poison detected in 127. Poison not dedected in 82.	198	128	394	203	127	399
		2. Cases in which tissues other than viscera were tested for poison.	..	..	..	..	..	..

		Nature of exhibits	1944 Total number of cases investigated	1944 Total number of cases detected	1944 Total number of articles examined	1945 Total number of cases investigated	1945 Total number of cases detected	1945 Total number of articles examined
		1	2	3	4	5	6	7
Human Poisoning cases (A)	General	3. Cases in which excreta, dejecta, vomit or stomach contents received without viscera were tested for poison.	98	72	173	93	65	150
		4. Cases in which only miscellaneous articles were received.	31	24	72	31	22	138
		5. Miscellaneous articles received with cases under entries 1, 2 and 3.	..	..	453	..	..	361
	Abortion	6. Cases in which viscera and contents were examined. The viscera of 1 individual. Poison detected in— Poison not detected in 1.	8	3	16	1	..	2
		7. Cases in which only miscellaneous articles were received.	..	..	..	..	..	..
		8. Miscellaneous articles received with cases under entry 6.	..	..	18	..	..	6
		Total (A) ..	335	227	1,126	328	214	1,056
Animal Poisoning Cases (B)		9. Cases in which viscera and contents from horned cattle were tested for poison. The viscera of 14 cattle. Poison detected in 3—poison not detected in 11.	13	7	16	11	2	11
		10. Cases in which viscera and contents from animals other than horned cattle were tested for poison.	1	..	1	3	1	10
		11. Cases in which animal tissues other than viscera were tested for poison.	..	..	..	..	..	..

	Nature of exhibits	1944 Total number of cases investigated	1944 Total number of cases detected	1944 Total number of articles examined	1945 Total number of cases investigat	1945 Total number of cases detected	1945 Total number of articles examined
	1	2	3	4	5	6	7
Animal Poisoning cases (B).	12. Cases in which animal excreta, dejecta or stomach contents forwarded without viscera were tested for poison.	..	..	..	..	..	..
	13. Cases of animal poisoning in which only miscellaneous articles were received.	8	6	8	6	5	9
	14. Miscellaneous articles received with cases under entries 9, 10, 11 and 12.	..	..	16	.	..	13
	Total (B) ..	22	13	41	20	8	43
Stain cases (C)	15. Bloodstains cases other than no. 16.	573	542	2,[illegible]0	591	577	2,567
	16. Bloodstains, rape and unnatural, crime cases.	..	..	..	..	..	..
	17. Seminal stain cases	13	13	29	18	18	42
	18. Mixed blood and seminal cases.	188	188	423	197	197	471
	19. Other stain cases ..	1	1	4	..	..	..
	Total (C) ..	775	744	2,958	806	792	3,080
Miscellaneous cases (D)	20. Cases in which bones, hairs, etc. were received.	1	1	5 1	2	2	3
	Identification of hairs, etc. received with stain cases under item 15.	..	..	39	..	..	22
	Total (D) ..	1	1	45	2	2	25
	GRAND TOTAL ..	1,133	985	4,170	1,156	1,016	4,204

TABLE III—*Showing the nature of poisons detected according to articles under entries 1 to 14 of Table II*

Nature of poisons	Human poisoning				Animal poisoning			
	General and abortion							
	In viscera and contents	In tissues other than viscera	In vomit and excreta received without viscera	In miscellaneous articles	In viscera and contents	In tissues other than viscera	In vomit and excreta received without viscera	In miscellaneous articles
1	2	3	4	5	6	7	8	9
Abrus precatorius	..	..	..	5	..	..	..	..
Aconite	7	..	..	12	1	..	..	..
Alcohol	12	..	1	3	..	..	..	..
Alcohol and opium ..	4	..	..	3	..	..	..	..
Arsenic	26	..	4	21	1	..	..	2
Arsenic and opium ..	4	..	..	3	..	..	..	..
Arsenic, opium and mercury ..	2	..	..	..	..	..	..	..
Bhang	2	..	2	7	..	..	..	..
Carbolic acid	..	..	..	1	..	..	..	..
Croton	..	..	..	3	..	..	..	..
Dhatura..	29	..	81	62	..	..	..	...
Dhatura and opium ..	2	...	..	..	...	..	...	..
Dhatura and bhang ..	..	..	1	2	..	...	..	..
Ganja	..	..	..	3	..	..	..	..
Glass	..	..	2	6	..	..	..	..
Hydrocyanic acid	4	..	..	..	..	..	..	..
Hydrochloric acid and nitric acid.	..	..	..	4	..	..	..	..
Hydrocyanic acid camphor and aconite.	4	..	..	1	..	..	..	..
Lalchitra	..	..	..	1	..	..	..	..
Mercury..	2	..	1	5	..	..	..	..

Nature of poisons	Human poisons				Animal poisoning			
	General and abortion							
	In viscera and contents	In tissues other than viscera	In vomit and excreta received without viscera	In miscellaneous articles	In viscera and contents	In tissues other than viscera	In vomit and excreta received without viscera	In miscellaneous articles
1	2	3	4	5	6	7	8	9
Mercuric chloride	4	..	..	..	..	..	..	..
Marking nut	..	..	..	1	..	..	..	..
Nux vomica	..	..	..	4	..	..	..	..
Opium	147	..	8	20	..	..	..	..
Opium and mercury ...	..	..	..	1	..	..	..	..
Potassium cyanide.. ..	..	..	..	1	..	..	..	..
Sulphuric acid	..	..	..	1	..	..	..	..
Yellow oleander	..	..	..	4	1	..	..	7
Total number of articles in which poison was detected.	249	..	100	174	3	..	..	9
Total number of articles in which poison was not detected.	152	..	50	331	18	..	..	13
Grand total ..	401	..	150	505	21	..	..	22

TABLE IV—*Showing places from which the viscera tested for poison have been received during the year* 1945

Division	District	Human: No. of cases	Human: No. of cases in which poison was detected	Cattle: No. of cases	Cattle: No. of cases in which poison was detected
1	2	3	4	5	6
United Provinces					
Meerut	Dehra Dun	3	2	..	..
	Muzaffarnagar ..	1	1	..	..
	Saharanpur	1	1	..	..
	Meerut	7	4	1	..
	Bulandshahr ..	..	..	2	..
	Roorkee	6	2	..	..
Agra	Agra	19	6	2	..
	Aligarh	2	1	..	..
	Etah	3	2	..	..
	Mainpuri	4	1	..	..
	Muttra	7	7	..	..
Rohilkhand	Bareilly	..	..	..	..
	Moradabad	2	2	..	..
	Budaun	2	2	..	..
	Bijnor	2	2	..	..
	Pilibhit	2	1	..	..
	Shahjahanpur ..	4	2	..	..
Benares	Benares	7	6	..	..
	Mirzapur	..	..	..	..
	Ghazipur	2	2	2	1
Allahabad	Allahabad	8	5	..	..
	Cawnpore	5	4	..	..
	Farrukhabad ..	..	..	..	..
	Etawah	2	2	..	..
	Fatehpur	3	3	..	..

Human				Cattle	
Division	District	No. of cases	No, of cases in which poison was detected	No. of cases	No. of cases in which poison was detected
1	2	3	4	5	6
Gorakhpur ..	Azamgarh	..	..	..	..
	Gorakhpur	3	1	1	1
	Ballia	2	1	..	..
	Basti .. .	2	..	..	..
Jhansi ..	Jhansi	..	..	..	..
	Hamirpur	1	..	..	..
	Banda (Karwi) ..	1	..	..	..
Fyzabad ..	Jalaun	3	2	..	..
	Gonda	2	2	..	..
	Bahraich	1	1	..	..
	Fyzabad	5	3	..	..
	Bara Banki	4	1	..	..
	Sultanpur	..	..	..	..
Lucknow ..	Jaunpur	1	..	..	..
	Lucknow	4	2	..	..
	Hardoi	5	4	..	..
	Sitapur	7	4	2	..
	Kheri	9	5	..	..
	Unao	7	6	1	..
	Rae Bareli	5	5	..	..
Kumaun ..	Almora	1	..	..	..
	Ranikhet	1	..	..	..
Central Provinces					
Nagpur ..	Nagpur	7	4	..	..
	Chhindwara .	1	..	..	..
	Betul	1	..	..	..
	Chanda	1	1	..	:

Division	District	Human: No. of cases	Human: No. of cases in which poison was detected	Cattle: No. of cases	Cattle: No. of cases in which poison was detected
1	2	3	4	5	6
Jubbulpore ..	Khandwa	1	1	..	..
	Jubbulpore	9	5	..	..
	Saugor	1	1	..	..
	Hoshangabad ..	..	..	..	..
Chhattisgarh..	Mandla	..	...	1	..
	Narsinghpur.. ..	1	1	..	..
	Raipur	1	..	..	..
	Drug	1	1	..	..
	Bilashpur	1	1	..	..
	Bhandara.. ..	3	2	..	..
Berar ..	Balaghat	1	..	..	..
	Seoni	..	...	1	..
	Amraoti	..	..	1	1
	Akola	2	2	..	..
	Buldana	1	..	..	..
	Yeotmal	..	..	..	..
	Ajmer and States				
Ajmer ..	Ajmer	4	3	..	..
States ..	Amla	1	..	..	..
	Mhow	2	1	..	..
	Surguja	1	1	..	..
	Kotah	1	1	..	..
	Udaipur	2	2	..	..
	Rampur	3	3	..	..
	Kawarda	1	1	..	..
	Rajnandgaon ..	1	1	..	..
	Total ..	204	127	14	3
	Total number of cases in which poison was not detected.	..	77	..	11
	Grand Total ..	204	204	14	14

TABLE V—*General analysis for Government Departments*, 1945

Received from	Nature of substances	Number of examinations	Increase or decrease over previous year
Civil Department ..	Liquor	754	
	Wash	251	
	Beer	3	
	Ganja	176	
	Bhang	33	
	Charas	18	
	Cocaine	8	
	Opium	451	
	Madak	28	
	Chandu	2	
	Joga	2	
	Inchi	1	
	Alcoholic medicines .. .	3	
	Mrit Sanjiwani Sura .	2	
	Amar Sura	1	
	Petrol	4	
	Note forging materials ..	7	
	Naphthaline	1	
	Total ..	1,745	—110
Excise Department	Denatured spirit	94	
	Distillery spirit	41	
	Rectified spirit	17	
	Rum	1	
	Gin	2	
	Whisky	3	
	Liquors	3	
	Pyridine..	65	
	Caoutchoucine	62	
	Kirisine	5	
	Essence	3	

Received from	Nature of substances	Number of examinations	Increase o decrease over previous year
Excise Department (cont.)	Alcoholic medicines ..	305	
	Mrit Sanjiwani Sura ..	1	
	Fusel Oil	7	
	Molasses	2	
	Ganja	1	
	Bhang	8	
	Charas	1	
	Motor fuel	1	
	Hard Crust Deposit of Still ..	1	
	Hydrometers and Thermometers	53	
	Total ..	676	+192
Municipal Department	Nil		—3
Other Departments..	Distillery spirit	1	
	Denatured spirit	5	
	Alcoholic medicines ..	6	
	Pyridine..	2	
	Bhang	1	
	Caoutchoucine	4	
	Paraldehyde	1	
	Water	7	
	Methylated spirit	1	
	Incendiary substances ..	2	
	Naphthaline	1	
	Usar	1	
	Cartridge cases and utensils ..	11	
	Medicinal powder	1	
	Khandsari sugar	7	
	Hesian cloth containing borax..	6	
	Ochre	1	
	Gin	5	
	Miscellaneous	1	
	Dhoop-Kapur	1	
	Kerosene oil	5	
	Total ..	70	+42
	Grand Total ..	2,491	+121